UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,510	07/07/2003	Henrik S. Klint	8627-227	9194
	7590 11/10/201 ER GILSON & LIONE	EXAMINER		
P.O. BOX 1039	95		FOREMAN, JONATHAN M	
CHICAGO, IL 60610			ART UNIT	PAPER NUMBER
			3736	
			MAIL DATE	DELIVERY MODE
			11/10/2010	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/615,510	KLINT, HENRIK S.			
		Examiner	Art Unit			
		JONATHAN ML FOREMAN	3736			
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on <u>25 Au</u>	iaust 2010				
'=	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
′=	<del>/</del>					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	closed in accordance with the practice under Ex pane Quayle, 1955 C.D. 11, 455 O.G. 215.					
Dispositi	on of Claims					
4)🖂	)⊠ Claim(s) <u>1-11,13-30 and 32-36</u> is/are pending in the application.					
. —	4a) Of the above claim(s) <u>2,7,8,10,11,13-18,20,21,23-28 and 32-36</u> is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
· · · · · · · · · · · · · · · · · · ·						
· ·	Claim(s) is/are objected to.					
•	Claim(s) are subject to restriction and/or	election requirement				
<b>∪</b> /∟	diami(o) are subject to rectriction are join	oloollon roquiromonic.				
Application	on Papers					
9)☐ The specification is objected to by the Examiner.						
-	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
, —		• •				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The patrol declaration is objected to by the Examiner. Note the attached office Action of form 1.10-102.						
Priority u	nder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	te			

Application/Control Number: 10/615,510 Page 2

Art Unit: 3736

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3 5, 9, 19, 22, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5, 178,158 to de Toledo in view of U.S. Patent No. 5,993,424 to Lorenzo et al.

In regard to claims 1, 3 – 5, 9, 19, 22, 29 and 30, de Toledo teaches a guidewire (Abstract) including a proximal body portion (11) having a first diameter and comprising a multiple filament group of individual wire coils wound adjacent one another (Col. 4, lines 42 – 45), defining an open lumen (22); a distal end portion (13) having a substantially constant diameter along a distance of at least four wound wire coils, and an elastic low-friction coating (40) disposed over the distal end portion and at least a part of the proximal body portion. De Toledo discloses the distal portion having a flexibility greater than the proximal portion (Col. 4, lines 54 - 57). However, de Toledo fails to disclose the proximal portion having a first diameter and the distal portion having a second diameter less than the first, and a taper portion having a taper from the first diameter to the second diameter. Lorenzo et al. teach a medical device (Figure 2)67 having a proximal portion (42) having a first diameter, a distal portion (44) having a second diameter smaller than the first diameter over a distance of at least four wound wire coils (Figure 2) and a tapered portion (Between 42 and 44) having a taper from the first diameter to the second diameter. It would have been obvious to one

Art Unit: 3736

having ordinary skill in the art at the time the invention was made to modify the guidewire as disclosed by de Toledo to include a tapered portion between the proximal portion and a distal portion having a reduced diameter so that the tip of the guidewire can accommodate a radiopaque marker band if desired (Col. 3, lines 25 - 28). Creating a tapered portion would result in the multiple-filament group of wire coils forming the taper being wound at a pitch angle different than a pitch angle of a multiple-filament group of individual wire coils of a body portion in that the diameter from which the coil is round is reduced. De Toledo discloses a coating (40) over the length of the guidewire. Modifying the guidewire to include a taper as taught by Lorenzo et al. would lead to a taper defined by the coating having a generally equal slope to that of the taper of the body portion.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,178,158 to de Toledo in view of U.S. Patent No. 5,993,424 to Lorenzo et al. as applied above and further in view of U.S. Patent No. 5,980,471 to Jafari.

In regard to claim 6, de Toledo. in view of Lorenzo et al. disclose the guidewire having a coating comprising a low-friction coating such as Teflon (Col. 5, lines 12 - 13), but fail to disclose the coating being a hydrophilic material. Jafari disclose a guidewire having a low-friction coating including Teflon or a hydrophilic material (Col. 6, lines 37 – 42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the Teflon coating disclosed by de Toledo in view of Lorenzo et al. with the hydrophilic material as taught by Jafari in that Jafari teach a Teflon coating and a coating including hydrophilic material as being functionally equivalent and therefore interchangeable. Additionally, the claim would have been obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Because both de Toledo and Jafari teach low-

Art Unit: 3736

friction coatings for use on a guidewire, it would have been obvious to one skilled in the art at the time of the invention to substitute one coating for the other to achieve the predictable results of reducing drag on the guidewire during insertion into a body.

## Response to Arguments

4. Applicant's arguments filed 8/25/10 with respect to the claims have been considered but are not persuasive. Applicant failed to include arguments specifically directed to the combination of de Toledo in view of Lorenzo et al. Applicant did argue that the device of Lorenzo et al. does not include an open lumen that is unoccupied for substantially its entire length and in fact teaches against such a feature. However, the combination of de Toledo in view of Lorenzo et al. is not based on a teaching of Lorenzo et al. related to an unoccupied lumen; de Toledo discloses an unoccupied lumen. Lorenzo et al. is relied upon for a teaching of tapering a distal portion of the coil. Thus, the Examiner maintains the combination of de Toledo in view of Lorenzo et al. is proper and does not teach away from the claimed invention.

#### Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/615,510

Art Unit: 3736

Any inquiry concerning this communication or earlier communications from the examiner

Page 5

should be directed to JONATHAN ML FOREMAN whose telephone number is (571)272-4724.

The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. F./

Examiner, Art Unit 3736

/Max Hindenburg/

Supervisory Patent Examiner, Art Unit 3736